## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
	)	
	)	
A National Broadband Plan for our Future	)	GN Docket No. 09-51

# COMMENTS OF W. KENNETH FERREE, PRESIDENT, AND BARBARA S. ESBIN, SENIOR FELLOW AND DIRECTOR OF THE CENTER FOR COMMUNICATIONS AND COMPETITION POLICY AT THE PROGRESS & FREEDOM FOUNDATION

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W. Kenneth Ferree and Barbara S. Esbin, of The Progress & Freedom Foundation, hereby file these Comments in response to the Notice of Inquiry (the "NOI") in the above-referenced proceeding.<sup>2</sup>

#### INTRODUCTION AND SUMMARY

The American Investment and Recovery Act of 2009 (the "Recovery Act") <sup>3</sup> directs the FCC to develop a national plan to ensure that "all people of the United States have access to broadband capability." <sup>4</sup> The Recovery Act further requires that the plan also include four specific elements: (1) an analysis of the most effective and efficient mechanisms for ensuring broadband access by all; (2) a detailed strategy for achieving affordability of the service and maximum utilization of broadband infrastructure; (3) an

<sup>1.</sup> The views expressed herein are their own, and are not necessarily the views of the PFF board, fellows or staff.

<sup>2.</sup> In the Matter of A National Broadband Plan for Our Future, *Notice of Inquiry*, 24 F.C.C.R. 4342 (2009) [hereinafter NOI].

<sup>3.</sup> American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009).

<sup>4.</sup> *Id.* § 6001(k)(2). Subsection (k)(1) directs the FCC to submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate, "a report containing a national broadband plan." The Recovery Act was signed into law on February 17, 2009; the National Broadband Plan must be delivered to Congress not later than February 17, 2010.

evaluation of the status of broadband service deployment, including other federal grant projects; and (4) a plan for the use of broadband infrastructure and services to advance certain other public interest goals and national purposes.

From this comparatively broad charge that seeks as its primary purpose ensuring that all people of the United States have "access to broadband capability," the FCC has derived and posited in the *NOI* hundreds of questions of greater and lesser relevance to this goal. In general, however, the *NOI* delves into four areas of inquiry: (1) how should broadband be defined; (2) what does it mean to have broadband "access;" (3) to what extent, if any, is government intervention in the market necessary; and (4) should the government favor or mandate specific broadband business models (*i.e.*, should open network models be required or encouraged). With respect to each of these general areas of inquiry, history suggests that greater business flexibility and sensitivity to market signals will be the key to success.

In developing its plan, the Commission must remain cognizant of the fact that it is not writing on a "clean slate" as broadband deployment is quite far advanced in the U.S. Moreover, before the plan is established, it is likely that broadband stimulus funding will have commenced under both the National Telecommunications and Information Agency's (NTIA) Broadband Technology Opportunities Program (BTOP) grant program and Department of Agriculture, Rural Utilities Service (RUS) loan and grant program. In addition, the Commission has been charged with developing a plan before either undertaking a market analysis of the existing competitive environment or receiving the results of the broadband mapping efforts also called for by the Recovery Act. It is a bit like the old adage, "Fire, Aim, Ready." By necessity, therefore, the FCC's national

broadband plan may be more in the nature of a framework, to be revised and augmented as the key data from the broadband mapping exercise and Broadband Data Improvement Act (BDIA)<sup>5</sup> become available.

As Acting FCC Chairman Copps observed in launching the *NOI*, the national broadband plan must be "focused, practical" and achievable. Instead of trying to resolve every contentious issue that has fueled so many years of seemingly-endless debates over telecommunications – debates that have too often deflected us from the progress we should have been making – we will go in quest of practical suggestions that can be deployed in time to respond to the economic and many other challenges facing us." This is an eminently sensible view of the national broadband plan undertaking before the Commission. It directs the aim of the national broadband plan to achievement of the primary purposes of the Recovery Act's broadband provisions: sustainable economic recovery through the expansion and upgrading of our broadband footprint, thus ensuring ubiquitous access to adequate broadband capability while addressing impediments to utilization of broadband access by vulnerable populations.

<sup>5.</sup> Broadband Data Improvement Act of 2008, Pub. L. 110-385, 122 Stat. 1400 (2008).

<sup>6.</sup> Statement of Acting Chairman Michael J. Copps, Re: A National Broadband Plan for Our Future, FCC 09-31, at 2 (emphasis supplied).

To these ends, we suggest that the strategic national broadband plan under development must:

- 1. Adopt flexible and dynamic definitions of broadband. Any definition chosen should keep in mind the purpose of the Recovery Act and should determine the level of broadband capability needed for purposes of economic recovery and sustainable growth. The Commission may wish to identify a range of broadband service transmission speeds to be achieved in stages rather than specify a single (and perhaps uneconomic) level of speed. This definition should be flexible to avoid hindering innovations in the broadband market.
- 2. **Be based on a realistic assessment of the state of the market for broadband.** The implementation of the plan should take into account both availability of broadband and the actual consumer expectation and demand in individual markets. To date, market forces have successfully achieved this balance in most areas. The primary goal should be devising a plan that assures access to (including the ability to utilize) "broadband capability," by at least one provider in areas currently not served.
- 3. Recognize the success of the FCC's recent approach to regulation of broadband services, which encourages facilities-based competition. The FCC's "light touch" regulatory approach was an instrumental factor in achieving widespread infrastructure deployment. This reliance on market mechanisms has already brought broadband access to a majority of the U.S. Successful policies that have led to facilities-based competition should be incorporated into the national strategic broadband plan. The plan should develop a comprehensive policy framework for achieving the goals of ubiquitous broadband availability and utilization in a manner conducive to continued private investment in broadband infrastructure.
- 4. Refrain from widespread government intervention in light of the healthy state of competition in the broadband market. Evidence of broad market failure justifying regulatory intervention in the majority of broadband markets is lacking. Providers therefore should have maximum flexibility to experiment with service offerings, rates, terms, and conditions to encourage competition. There is no need to codify the FCC's existing *Internet Policy Statement* as part of a national broadband strategy, which would result in unwelcome intervention in the already thriving market. The level of openness and network intermediary functionality available on any network is best determined by consumers and service providers rather than regulators.

#### **ANALYSIS**

### I. ANY DEFINITIONS ADOPTED IN THE PLAN SHOULD BE FLEXIBLE AND DYNAMIC.

The *NOI* begins with a series of questions regarding definitional issues that arise in the context of developing a national broadband plan.<sup>7</sup> The difficulty inherent in the inquiry is that "broadband" is not a single monolithic concept. Instead, the term can encompass a wide range of technologies, infrastructures, and services, each tailored to specific populations, consumer needs, or market segments. As the *NOI* appropriately recognizes, mobile broadband services differ in several ways from wireline services, and even within those broad categories, different kinds of networks have developed, using different technologies, offering services that have differing advantages and challenges.

Accordingly, it is entirely inappropriate, if not impossible, to define with rigid precision what is meant by "broadband" and which services or networks should or should not be included within it except in the context of specific purposes and programs. Indeed, to the extent the government endeavors to do so, whatever definition it adopts will almost certainly be technologically obsolete within a short time span. The definition chosen, therefore, should pertain to the overall purposes of the Recovery Act: economic stimulus leading to sustainable economic recovery through investment in broadband network infrastructure and programs aimed at driving demand for broadband services. Therefore, the plan should first determine the level of broadband capability that is needed for purposes of economic recovery and sustainable economic growth.

This is not to say that the effort to add some definitional rigor to terms that are often casually misused is of no value. Congress, the Commission, and other government

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<sup>7.</sup> NOI, *supra* note 2 ¶¶ 15-22.

agencies should have some analytically useful understanding of the technologies driving modern communications and information services, and a common set of accepted definitions is, of course, an important step toward that end.

We suggested in our Comments responding to the Joint Request for Comments on Implementing the American Recovery and Reinvestment Act of 2009,<sup>8</sup> that the National Telecommunications and Information Agency (NTIA) should utilize the FCC's existing definition of "basic broadband tier 1" service (at least 768 kbps in a at least one direction) for determining which areas are "unserved" and "underserved" by broadband. Using off-the-shelf definitions would "avoid unnecessary and distracting disputes over whether the U.S. should aspire to ubiquitously-provided super-fast networks. Of course it should, but that is not the primary purpose of the Recovery Act." If super-fast broadband networks are the goal of the national broadband plan, then a set of broadband transmission speeds will need to be identified as a baseline from which to measure our progress, and the FCC's current definitions are adequate for that purpose.

Acting Chairman Copps stated in his *Report on a Rural Broadband Strategy*, "We must marry the dynamic innovations and flexibility of the private sector with the policy vision of the public sector to create a model of how government and industry can partner to ensure ubiquitous broadband access." The FCC's national plan can set bandwidth goals to be achieved by a date or dates certain, but if it unnecessarily constrains the

8. Comments of W. Kenneth Ferree, President, and Barbara Esbin, Senior Fellow and Director of the Center for Communications and Competition Policy at The Progress & Freedom Foundation, Joint Request for Comments on Implementing the American Recovery and Reinvestment Act of 2009, NTIA Docket No. 090309298-9299-01, GN Docket No. 09-40, filed April 10, 2009, at 5-8.

<sup>9.</sup> *Id*. at 5.

<sup>10.</sup> Michael J. Copps, Acting Chairman, Federal Communications Commission, *Bringing Broadband to Rural America, Report on a Rural Broadband Strategy* ¶ 7 (May 22, 2009) [hereinafter Rural Broadband Strategy Report].

"dynamic innovations and flexibility of the private sector" essential to reaching those goals, it will be unlikely to succeed.

The wide array of technologies and services at issue, however, and the rapid pace at which these technologies and services evolve, suggest that any definitions adopted by the FCC in this proceeding should be extremely flexible and as nearly dynamic as the market itself.<sup>11</sup> Otherwise, there is a very real danger that the FCC's definitions will themselves become an impediment in a market defined by, and dependent upon, growth and innovation. For these reasons, the Commission may wish to identify a range of broadband service transmission speeds to be achieved in stages rather than specify a single (and perhaps uneconomic) level of speed to be achieved in one fell swoop.

### II. BROADBAND ACCESS CAN AND SHOULD MEAN DIFFERENT THINGS TO DIFFERENT PEOPLE.

The *NOI* also devotes several paragraphs to an inquiry into what it means to have "access" to broadband services.<sup>12</sup> For instance, the *NOI* asks whether availability or access should be measured differently depending upon the various locations at which people might interact with advanced communications services (*e.g.*, home, school, work, public libraries),<sup>13</sup> whether access is dependent in any way on consumer expectations and, specifically, whether the Commission should institute a rulemaking to codify the

<sup>11.</sup> As the NOI notes, the Commission previously sought comment on a dynamic definition of broadband in 2007, but ultimately did not adopt this type of definition in the 2008 Data Gathering Order. NOI, supra note 2 § 18 n.21, citing Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership, Report and Order and Further Notice of Proposed Rulemaking, 23 F.C.C.R. 9691, 9702 ¶ 22 (2008).

<sup>12.</sup> NOI, *supra* note 2 ¶¶ 23-28.

<sup>13.</sup> *Id*. ¶ 23.

principles articulated in its Internet Policy Statement, <sup>14</sup> and whether "access" should be defined to include a certain number of providers or services at given price points.

Again, the difficulty is one of practicality, not policy. No one would dispute that, as a matter of pure principle, more selection among and between providers is better than fewer, lower retail pricing is likely to lead to faster consumer adoption than higher prices, more consumer freedom and flexibility within a network is preferable to less, access in the privacy of one's home may be preferable to access in a public setting, and access should not be location dependent.

The real world of advanced communications and information services is not wrapped up and packaged so neatly, however. In fact, users and would-be users come in all shapes and sizes, with widely varying needs and price sensitivities, and whose demands and expectations from broadband services require networks of different capacities, some of which might be location specific. Again, as with the exercise of defining broadband itself, there is a tremendous risk that efforts to establish rigid standards for that which would constitute acceptable "access" would only limit business and technological innovation, experimentation, and ultimately realization of universal broadband connectivity.

Thus, access to "broadband capability" for purposes of the national broadband plan should be interpreted to mean access to at least one provider, and the FCC's primary goal should be devising a plan that assures such access where it is lacking today. 16 As

<sup>14.</sup> *Id*. ¶ 24.

<sup>16.</sup> We address our comments in this section primarily to "supply" side issues while at the same time recognizing that "demand" side issues also must be taken into account in the national plan. It is well understood that broadband availability today outstrips service penetration, and that government can play a useful role in addressing the lag in adoption due to factors such as low income or lack of

discussed in Section III, *infra*, access to the competitive provision of broadband services including all technologies (wired, fixed and mobile terrestrial wireless and satellite) is nearly ubiquitous today and head-to-head wired broadband competition (via cable modem and digital subscriber line technologies) exists in well over two-thirds of the nation and is growing where it is economically feasible and sustainable.<sup>17</sup>

The national plan should encourage additional deployment by removing remaining regulatory barriers to entry or expansion, such as facilitating a faster wireless tower siting process or making more spectrum available for wireless connectivity. <sup>18</sup> Geographic areas in which providers offer last mile broadband connectivity sufficient for today's applications but are unable to upgrade to faster speeds for lack of adequate connectivity to network access points may also warrant special attention. <sup>19</sup> But at the same time the plan should avoid interfering with the workings of the marketplace in areas currently experiencing vigorous broadband competition. In short, the national broadband plan should continue to rely on market forces to the greatest extent possible, focus on concrete and pressing problems to be solved, and eschew regulatory intervention where it is not needed.

computing equipment and digital literacy. See Rural Broadband Strategy Report, *supra* note 10 ¶ 105 ("Given that sustained deployment of broadband services is unlikely without sufficient consumer demand for broadband services, a strategy designed to promote rural broadband adoption must examine and address the discrepancy between broadband availability and broadband adoption."); Horrigan, *supra* note 15, at 3 ("Nonadopters are older and lower-income Americans, and it would take time to undertake the training and support needed to turn them into competent online users. ... [O]ne-in-five Americans currently don't have broadband for reasons that won't be addressed by price cuts or a fiber node in the neighborhood.").

<sup>17.</sup> Shane Greenstein and Ryan C. McDevitt, *The Broadband Bonus: Accounting for Broadband Internet's Impact on U.S. GDP, NBER Working Paper No. w14758, p. 32, Feb. 2009, available at http://www.nber.org/papers/w14758.* ("[P]rivate firms invested large sums of money when the *incremental* gains from doing so were potentially large, as they were for cable firms facing no cannibalization issues ..., and as they were for both cable firms and telephone firms that faced low upgrade costs in urban and suburban settings ...").

<sup>18.</sup> See Rural Broadband Strategy Report, supra note 10 ¶¶ 158, 142-150.

<sup>19.</sup> *Id*. ¶¶ 151-154.

The economic story of the 20<sup>th</sup> Century is littered with instances of failed application of a "command and control" approach to difficult economic problems.<sup>20</sup> When dealing with markets as varied and complex as the modern communications and information markets, top-down government plans with fixed definitions, standards, and mandates tend toward market stagnation and failure, while free, dynamic economic systems thrive.

There is nothing to suggest that the broadband markets are in any meaningful way an exceptional case.<sup>21</sup> To the contrary, to date and with few exceptions, the markets have performed remarkably well at determining the level of capacity that can be sustained in any given area, the types of services that consumers want and demand, the level of service appropriate for various user demographics (e.g., business versus residential users), and the price points at which service can be provided at a sustainable level.

<sup>20.</sup> See, e.g. Herbert S. Levine, Why Soviet Central Planning Failed (Feb. 1995), The University of Pennsylvania, Economies and Societies in Transition website, available at http://www.ssc.upenn.edu/east/spring95/levin.html (failure of the Soviet system of central planning was due to the bureaucratization of the entire economy to support military growth perceived as necessary by Soviet leaders, which in turn multiplied the information burden on decision makers. intensifying the use of routines to a very high degree; "such a bureaucratized environment is not conducive to innovation leading to technical change (it particularly inhibits organizational innovation)" and it is unable to respond efficiently to changes in consumer demand and other forces); John Barnes, Washington Policy Center, The Failure of Government Central Planning: Washington's Medical Certificate of Need Program (Jan. 2006), http://www.washingtonpolicy.org/Centers/healthcare/policynote/05 barnes constudy.html ("[Certificate of Need] laws grew out of the belief that surplus supply of medical facilities and services meant providers would pass the excess cost on to patients The National Health Planning and Resources Development Act of 1974 directed each state to examine proposed health care facilities and determine the need for such services. Eventually, every state adopted CON laws. In 1982, however, the federal government acknowledged the failure of CON laws to reduce health care costs and repealed national health planning).

<sup>21.</sup> For this reason, the Commission should resist calls to treat broadband Internet access as a "utility" service and impose utility-like common carrier rules developed for single purpose transportation and communications networks in the late 19<sup>th</sup> Century. *See, e.g.,* S. Derek Turner, Free Press, *Dismantling Digital Deregulation: Toward a National Broadband Strategy,* http://www.freepress.net/files/Dismantling\_Digital\_Deregulation.pdf (last accessed May 29, 2009) (recommending that the FCC redefine "broadband" as an information service with a telecommunications service transport component – rendering the service subject to traditional Title II common carrier rules and regulations, including the Commission's *Computer Inquiry* mandates).

Government intervention to address areas of market failure – that is, no broadband availability – should be timely, targeted, and temporary, <sup>23</sup> and that includes any plan to redirect universal service funding from supporting solely telecommunications services to supporting broadband Internet access services.

Finally, to the extent that the government does get directly involved in the market through additional grants or other broadband subsidies, any funds so distributed should be targeted at real bottleneck points and not used to overbuild private networks or satisfy particular political constituencies.

Thus, in developing its national broadband plan, the Commission should avoid a one-size-fits-all approach when defining an appropriate level of broadband access. It may simply be impossible for three different providers to maintain and continue to invest in improving networks in a particular rural area. Thus nothing will be gained by the government insisting that they do so.<sup>24</sup> Very high capacity connections might be entirely appropriate at health care, library, and educational institutions, while somewhat less robust connections may be perfectly acceptable for most individual users at their homes.<sup>25</sup> Access at their place of employment for many may be all that they need or

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<sup>23.</sup> Comments of Ferree and Esbin, supra note 8 at 5-8.

<sup>24.</sup> See Phoenix Center Policy Paper No. 21, Competition After Unbundling: Entry, Industry Structure and Convergence (2005), available at http://www.phoenix-center.org/pcpp/PCPP21Final.pdf, and reprinted in 59 Fed. Comm. L.J. 331 (2007). (Identifying the "equilibrium" number of firms in the industry as a function of the size of the market, the extent of price competition in the market, and the amount of fixed and sunk costs required for entry; arguing that regulation can and does impact all of these factors and therefore affects the number of firms that the industry can support; and demonstrating that public policy that reduces the market size by limiting the characteristics of products that may be sold by the network operator profitability – via price regulation – will decrease the number of firms that can profitably enter the market).

<sup>25.</sup> The economic downturn increases the need for adequate Internet connections in public libraries, which are playing an increasingly important role as resource centers for those hardest hit by economic pressures. See Tim Warren, Communications Daily, Libraries Hope Stimulus Will Boost Fiber Deployment, May 29, 2009. The national broadband plan should take account of the added impact of public broadband Internet availability at such anchor institutions. A recent Wall Street Journal article

want, regardless of what government planners might wish. The Commission's approach to "access" should be both technology neutral and flexible enough to account for the wide variety of human experience and the many ways in which people interact with and use broadband services.

#### III. The National Broadband Strategy Should Incorporate Successful Regulatory Policies That Have Encouraged Facilities-based Competition.

The NOI acknowledges that market mechanisms have been successful in ensuring access to broadband in many areas of the country. <sup>26</sup> At the same time it seeks comment on the extent to which facilities-based competition "should be evaluated as an effective and efficient mechanism to achieve the goals of the Recovery Act."<sup>27</sup> We believe that facilities-based competition has been instrumental in spurring both broadband deployment and adoption and strongly urge the Commission, in formulating its national broadband strategy, to continue to rely on these working market forces to achieve the goals of the Recovery Act.

Acting Chairman Copps observed in the Rural Broadband Strategy Report: "In developing these solutions [for rural areas], we are not starting from scratch."<sup>28</sup> The Rural Broadband Strategy Report acknowledges estimates that approximately 90 percent

reports that some homeless citizens now stay connected using email and accounts on Facebook, MySpace, and Twitter by means of Internet connections at public libraries and homeless shelters. Phred Dvorak, The Wall Street Journal, On the Street and On Facebook: The Homeless Stay Wired, May 30, 2009, available at http://online.wsj.com/article/SB124363359881267523.html ("You don't need a TV. You don't need a radio. You don't even need a newspaper," says Mr. Pitts, an aspiring poet in a purple cap and yellow fleece jacket, who says he has been homeless for two years. "But you need the Internet.")

<sup>26.</sup> NOI, supra note 2 ¶ 37. The NOI also seeks comment on where market-based policies have been unsuccessful in ensuring access and why.

<sup>27.</sup> *Id*. ¶ 49.

<sup>28.</sup> Rural Broadband Strategy Report, *supra* note 10 ¶ 10.

of households in the U.S. have access to some form of broadband service, <sup>29</sup> and that mobile broadband networks cover 95.6 percent of the total U.S. population and 82.8 percent of the rural population.<sup>30</sup> It also acknowledges that "Broadband connections have grown at a remarkable rate," with Internet connection "speeds exceeding 200 kbps in both directions growing from 4 million in 2000 to 80 million in 2007."<sup>31</sup> An earlier FCC report containing more granular data shows that as of December 31, 2007, 94.7 percent of the ZIP codes in the U.S. were served by 3 or more broadband providers (of all types) and 67.3 percent of the ZIP codes in the United States had two or more asynchronous digital subscriber line (ADSL) and/or cable modem high speed broadband providers.<sup>32</sup> Another 23.7 percent were served by ADSL or cable modem service; and yet others may be reached by satellite-delivered broadband Internet access services.<sup>33</sup> Wireless mobile broadband services were present in 94 percent of ZIP codes, with 34.7 percent already having three or more providers.<sup>34</sup> The Commission would do well to remember how we achieved our current state of nearly ubiquitous broadband deployment in developing its recommendations for a national broadband strategy.

In the mid-1990s, dial-up Internet access service was the dominant means by which American went "on-line." By 1995, AOL alone, for example, had over 4.5 million

<sup>29.</sup> *Id.* ¶ 105 n. 243, *citing* Comments of Connected Nation, Inc., GN Docket No. 09-29, Mar. 25, 2009, p. 9. *See also* National Cable & Telecommunications Association, *Availability (as of December 2008)*, http://www.ncta.com/StatsGroup/Availability.aspx (reporting that cable modem service is available to 92 percent of U.S. households).

<sup>30.</sup> Report on a Rural Broadband Strategy ¶ 14 n. 20, citing Indust. Analysis & Tech. Div., FCC, High Speed Services for Internet Access: Status as of December 31, 2007, Table 2 (rel. Jan. 2009).

<sup>31.</sup> *Id*. ¶ 27.

<sup>32.</sup> *Id.* Table 16.

<sup>33.</sup> *Id*.

<sup>34.</sup> *Id*.

subscribers.<sup>35</sup> By 1995, cable operators were moved to upgrade the capacity and capabilities of their cable systems because of competitive threats posed primarily by Direct Broadcast Satellite (DBS) operators who were poised to compete with cable's core multichannel video programming distributor (MVPD) services.<sup>36</sup> These network upgrades also permitted cable operators to offer their residential subscribers broadband Internet access or "cable modem" service and they soon became the dominant providers of residential broadband Internet access.<sup>37</sup> Telecommunications carriers and cable overbuilders then responded with their own digital subscriber line (DSL) and cable modem products, unleashing direct competition for new subscribers between cable operators and the telephone or broadband companies.<sup>38</sup>

Cable modem and DSL services remain the predominant form of wired broadband Internet access service available to residential subscribers today, but neither type of provider is resting on its laurels. For example, to better compete with the cable modem product, Verizon and AT&T (the nation's two largest telecommunications companies) began to upgrade their networks with Fiber-to-the-Home (FTTH) and Fiber-to-the-Node

<sup>35.</sup> Rose Aguilar, *AOL Boasts 4.5 Million Subscribers*, CNET News, Dec. 28, 1995, http://news.cnet.com/AOL-Boasts-4.5-Million-Subscribers/2100-1023 3-200836.html.

<sup>36. 47</sup> U.S.C. § 522(13) (the term "multichannel video programming distributor" means a person such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, or a television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming).

<sup>37.</sup> This strong cable modem competition has persisted. According to the FCC's latest report, of Dec. 31, 2007, cable modem services represented 50.7 percent of lines the FCC classifies as "advanced services lines" (delivering speeds of exceeding 200 kbps in both directions) while asymmetric digital subscriber lines represented 32.6 percent of such lines. Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, High Speed Services for Internet Access: Status as of Dec. 31, 2007 (Jan. 2009). The FCC defines "high-speed lines" as lines with speeds of 200 kbps in one direction and "advanced service lines" as lines with speeds of 200 kbps in both directions.

<sup>38.</sup> Vince Vittore, *Let's get ready to rumble*, Telephony Online, Jan. 25, 1999, http://telephonyonline.com/mag/telecom lets ready rumble/.

(FTTN) capability. Cable operators, in turn, began upgrading their platforms to support downstream data rates of up to 160 Mbps and upstream rates of up to 120 Mbps.<sup>39</sup>

Sensing opportunity and growing demand for mobility, wireless providers have been acquiring spectrum and building or upgrading wireless broadband platforms using a variety of network technologies including Wi-Fi and WiMAX.<sup>40</sup> Both mobile and fixed wireless broadband platforms are offering services that compete with or are complementary to wired alternatives. As more customers migrate to "smart phones" and wireless network cards for their laptops and notebook computers, mobile wireless data services are experiencing robust growth. Wireless network operators, in turn, are scrambling to meet the increased demand for bandwidth on their networks. AT&T has recently announced that it will double wireless data network speeds on its current 3G network from approximately 3 Mbps to 7.2 Mbps, and will begin testing its 4G Long Term Evolution (LTE) technology in 2010, building it into its network the following year.<sup>41</sup> Clearwire Corporation is currently rolling out a 4G mobile WiMAX broadband Internet service and plans to bring its CLEAR 4G service to 80 markets across the U.S. by the end of 2010.<sup>42</sup> Satellite broadband offers yet another option in areas too remote or

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<sup>39.</sup> See Rural Broadband Strategy Report, supra note 10 ¶ 10 n.10.

<sup>40.</sup> See In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Thirteenth Report, WT Docket NO. 08-27, DA 09-54, ¶1 (January 15, 2009) ("The metrics below indicate that there is effective competition in the CMRS market and demonstrate the increasingly significant role that wireless services play in the lives of American consumers.); Wireless Broadband Access Task Force, FCC, Connected & On the Go: Broadband Goes Wireless, p. 2-3 (Feb. 2005) ("we are witnessing significant technological advances, growth in users, and expansion of portable fixed and mobile applications.").

<sup>41.</sup> Frank G. Louthan IV, Raymond James Equity Research, *The Weekly Call*, June 1, 2009, at 2 (AT&T's upgrades to the evolved 3G or HSPA+ later his year will fall within the \$17-18 billion that the company expects to spend for 2009; in addition, the company plans on expanding its network to 370 metro areas from the 350 it already serves).

<sup>42.</sup> See Clearwire website, http://www.clearwire.com; Marguerite Reardon, Clearwire stays the course despite losses, CNet News (Mar. 5, 2009), http://news.cnet.com/8301-1035\_3-10190068-94.html. Clearwire and Cisco recently announced an alliance designed to enhance and expand the "Clear" 4G

expensive to serve with either wired or terrestrial wireless systems.<sup>43</sup> It is hard to imagine a government-directed program meeting or beating this impressive roll-out.

All of this infrastructure investment in the last ten to fifteen years has been driven by an overriding factor: Fear. Fear of losing subscribers or potential subscribers to the competition for one or more service offerings. We have achieved nearly ubiquitous broadband deployment in large part through reliance upon market forces and facilities-based competition, aided by a "light touch" regulatory framework that put a premium on infrastructure investment. It was neither mandated nor directed in its manner of development by the government. Although not available to 100 percent of the population today, facilities-based competition between wireline broadband Internet access services (either DSL or fiber) and cable modem services is widespread and still growing, with wireless broadband providing additional fixed and mobile options for broadband Internet connectivity.

Competition between platforms has spurred both additional infrastructure investment and service choice for consumers, and can continue to bring consumer benefits under a policy framework that provides a welcoming and stable environment for

mobile WiMax service for the consumer, small office or home office (SOHO), and small and medium-

sized business markets throughout the U.S. See Cisco Newsroom, Clearwire and Cisco Form Alliance to Deliver 4G Mobile Internet Services for Consumers and Businesses, May 13, 2009, http://newsroom.cisco.com/dlls/2009/prod\_051309b.html.

<sup>43.</sup> See, e.g., WildBlue, About WildBlue, <a href="http://wildblue.com/company/index.jsp">http://wildblue.com/company/index.jsp</a> (last accessed June 2, 2009). Wildblue provides an always-on, broadband Internet service that is comparable to DSL, but capacity is limited and prices consequently are high. New satellite capacity will be needed to meet anticipated broadband demand once the economy begins to recover; equity markets today are not providing capital necessary for expansion to meet this demand. See Virgil Dickson, Satellite Broadband is Healthy, Executives Say, Communications Daily (Apr. 14, 2009). See also Hughes and WildBlue Team Up To Fight for Broadband Stimulus Funding, Satellite Today (Apr. 28, 2009), available at <a href="http://www.satellitetoday.com/st/headlines/Hughes-and-WildBlue-Team-Up-To-Fight-for-Broadband-Stimulus-Funding\_30781.html">http://www.satellitetoday.com/st/headlines/Hughes-and-WildBlue-Team-Up-To-Fight-for-Broadband-Stimulus-Funding\_30781.html</a> ("Hughes has proposed to the NTIA that future satellites offer high download speeds and capacity and that the company's upcoming SpaceWay platform could offer download speeds of as high as 20 to 30 megabits per second").

investment.<sup>44</sup> This strongly suggests that the FCC's approach to refrain from imposing, and remove where existing, economic regulation of broadband Internet access services was an important, if not instrumental, factor in achieving the remarkable rate of infrastructure deployment and service innovation we see today.

Contrary to the implication in the *Rural Broadband Strategy Report*, <sup>45</sup> the FCC's decisions to refrain from imposing and/or removing "economic" regulation from the provision of broadband Internet access services was not the absence of conscious policy, but rather was itself a deliberate strategy to enhance network upgrades and broadband deployment through regulatory restraint. <sup>46</sup> The stated goal was to create a regulatory framework conducive to the massive amounts of investment necessary to move this country closer to ubiquitous broadband access for all. <sup>47</sup>

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<sup>44.</sup> The \$7.2 billion Congress allocated to broadband in the Recovery Act pales in comparison to the roughly \$70 billion of yearly private investment in broadband that our providers are currently expending. *See* Bobby White, "Spending Wave Buoys Makers of Network Gear, New Web Services Spur Phone Firms to Invest in Increasing Capacity," The Wall Street Journal (Feb. 14, 2007), available at http://www.redback.com/Data/standalone/WSJ Rbak 2 14 07.pdf.

<sup>45.</sup> See Rural Broadband Strategy Report, supra note 10 ¶¶ 122-23.

<sup>46.</sup> *In re* Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with regard to Broadband Services Provided via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided via Fiber to the Premises; Consumer Protection in the Broadband Era, *Report and Order and Notice of Proposed Rulemaking*, 20 F.C.C.R. 14,853, 14,899, ¶ 87 (Aug. 5, 2005) ("allowing non-common carriage arrangements for wireline broadband transmission will best enable facilities-based wireline broadband Internet access service providers ... to embrace a market-based approach to their business relationships with ISPs, providing the flexibility and freedom to enter into mutually beneficial commercial arrangements with particular ISPs.").

<sup>47.</sup> *In re* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Internet Over Cable Declaratory Ruling, Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, *Declaratory Ruling and Notice of Proposed Rulemaking*, 17 F.C.C.R. 4798, ¶ 5 (Mar. 15, 2002) [hereinafter Cable Modem Declaratory Ruling] ("[W]e believe 'broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market.' In this regard, we seek to remove regulatory uncertainty that in itself

For example, in its September 2005 *Wireline Broadband Order*, the FCC determined to treat wireline broadband Internet access services as "information services," consistent with its prior treatment of cable modem services. <sup>48</sup> These determinations effectively removed broadband Internet access services from legacy regulation under the Communications Act.

In the Wireline Broadband Order, the Commission found that there was sufficient present and likely future competition in the provision of broadband Internet access services. Therefore, it could remove the remnants of its Computer Inquiry structural and non-structural (functional) separation requirements from the Bell Operating Companies and, to the extent applicable, from other incumbent wireline telecommunications carriers. The FCC would no longer require any facilities-based wireline provider to offer a wireline broadband transmission component separately from the Internet service as a stand-alone service on a common carrier basis. It determined, however, that any provider who chose to offer transmission service on a common carrier basis would be free to do so. In the Commission's opinion, this new framework would provide a light touch regulatory environment for wireline broadband Internet access that would (1) benefit consumers by promoting innovative and efficient communications; (2) be consistent across all broadband platforms; (3) be sufficiently flexible to permit providers to respond to market demands effectively and efficiently; and (4) spur investment in and deployment of innovative broadband capabilities.

may discourage investment and innovation. And we consider how best to limit unnecessary and unduly burdensome regulatory costs.").

<sup>48.</sup> In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking, 20 F.C.C.R. 14,853, 14,863, ¶ 14 (2005).

Not long afterwards, U.S. incumbent carriers, notably Verizon and AT&T, announced plans for investments in fiber capacity that would permit them to compete in the provision of "triple-play" voice, video and data services. The level of capital expenditure involved in these network upgrades is enormous:

- In early 2007, the Wall Street Journal reported that North American telecommunications companies were projected to spend \$70 billion on new infrastructure for that year alone. 49
- AT&T recently announced that it would invest two-thirds of its 2009 capital expenditure budget of between \$17 and \$18 billion (a slight cap ex decrease since 2008) in building out wireless and wireline broadband networks to increase coverage, speed and capacity; that is \$38 billion in the past two years alone. <sup>50</sup>
- Verizon has not yet officially reported its 2009 capital expenditures number, but has indicated that it is expected to decrease slightly from 2008 levels of \$17.2 billion;<sup>51</sup>
- Verizon's capital expenditures for the past two years were \$34.7 billion, and since 2005, a total of \$67.1 billion. 52

These huge network investments are earning triple play subscribers for the telecommunications companies. For example:

• By year end 2008, Verizon's FiOS data service was available to 10 million homes, and its FiOS video service was available to 9.2 million premises. 53

<sup>49.</sup> White, supr a note 44.

<sup>50.</sup> Todd Spangler, AT&T To Cut Capital Spending In 2009, Multichannel News, Mar. 10, 2009, available at

http://www.multichannel.com/article/189778AT\_T\_To\_Cut\_Capital\_Spending\_In\_2009.php?nid=222 6&source=link&rid=5354251.

<sup>51.</sup> Doreen Toben, *Address at the Raymond James 30th Annual Institutional Investors Conference*, Mar. 9, 2009, http://investor.verizon.com/news/20090309.

<sup>52.</sup> See Verizon Annual Reports for 2005-2008, available at http://investor.verizon.com/financial/quarterly/index.aspx.

<sup>53.</sup> Stacey Higginbotham, *Verizon FiOS Picking Up Speed: Landline Losses Continue*, GigaOM, Jan. 27, 2009, http://gigaom.com/2009/01/27/verizon-fios-picking-up-speed-landline-losses-continue/, Jennifer Hull, *Verizon Doubles FiOS TV Subscribers in 2008*, BroadbandInfo.com, Feb. 6, 2009, available at http://www.broadbandinfo.com/news/verizon-doubles-fios-tv-subscribers-in-2008-596.html.

- From June 2006 to March 2009, the FiOS video service grew from 207,000 to 2.2 million subscribers. In the first quarter of 2009, Verizon added 299,000 video subscribers:<sup>54</sup> that places Verizon well within the ranks of the top 10 multichannel video programming distributors in the country.
- Verizon is also continuing expansion of its highest-speed DSL tier and plans to provide up to 7.1 Mbps downstream – to 9.7 million households in 21 states and the District of Columbia by mid-summer 2009. 55
- AT&T's U-verse video service reached 17 million homes by year-end 2008, bringing its total video subscribers to one million at year end. 56 The company expects to reach its previously announced target of 30 million living units in 2011, a year later than its original plan.<sup>57</sup>

Cable networks in the U.S. have never been subjected to the unbundling and/or structural and functional separation requirements imposed on telecommunications common carriers, although the FCC had several opportunities to do so. 60 The FCC established that cable modem services would be treated as then-unregulated "information

<sup>54.</sup> Press Release, Verizon Communications Reports Revenue, Earnings and Cash Flow Growth in 10 2009, Apr. 27, 2009, http://news.vzw.com/news/2009/04/pr2009-04-27.html; Spencer Ante, Broadband Battle: Verizon's Fiber Strategy Working But Enterprise Disappoints, BusinessWeek, Jan. 27, 2009, available at http://www.businessweek.com/the\_thread/techbeat/archives/2009/01/broadband\_battl.html?campaign id=rss blog techbeat. Further, the FiOS video service gained nearly one million subscribers in 2008 alone. Id.

<sup>55.</sup> Todd Spanger, Verizon Takes Higher-Speed DSL to 9.7 Million Homes, Multichannel News, May 20, 2009, available at http://www.multichannel.com/article/233087-Verizon Takes Higher Speed DSL To 9 7 Million Homes.php.

<sup>56.</sup> Amol Sharma, AT&T, Verizon Make Different Calls, Wall Street Journal, Technology section, Jan. 28, 2009, available at http://online.wsj.com/article/SB123307214837119815.html?mod=todays us marketplace. It is unclear if the one million subscribers include both the U-Verse fiber-to-the-home product and AT&T's resale of DBS service as a "co-marketed" or "resale product."

<sup>57.</sup> Id.

<sup>60.</sup> Cable Modem Declaratory Ruling, *supra*, note 47, ¶2 ("The issue of what, if any, regulatory treatment should be applied to cable modern service dates back to at least 1998, when it arose in the Commission's "First Section 706 Inquiry" about the deployment of advanced telecommunications capability. The Commission further considered the issue in several subsequent proceedings including a complaint case, license transfer reviews in connection with mergers involving cable operators, and a special report by the Commission's Cable Services Bureau. To date, however, the Commission has declined to determine a regulatory classification for, or to regulate, cable modem service on an industry-wide basis.") (citations omitted).

services," and this determination upheld by the U.S. Supreme Court in 2005.<sup>61</sup> As a result of this relatively benign regulatory environment, the cable industry has invested over \$146 billion since 1996 to upgrade and expand its networks to provide broadband access and related services.<sup>62</sup> High-speed Internet access over cable systems was available to 92 percent of American households by 2008.<sup>63</sup> Cable industry investment in advanced infrastructure and services has provided clear consumer benefits in the form of improved choices and service capabilities.

- Cable companies use their broadband capacity to offer a "triple play" of video, voice, and broadband Internet service in over 75 percent of American households and by 2007, according to Bernstein Research analyst Craig Moffett, cable had 44.9 percent of the total U.S. residential triple play market by subscription. 64
- NCTA's 2008 Cable Industry Overview shows the cable industry with 35.6 million high-speed Internet service subscribers and 15.1 million voice telephony customers; by year end that number is likely to have grown to over 19 million.<sup>65</sup>
- The nation's largest cable operator, Comcast, recently announced that it has become the nation's third largest residential voice provider. 66

<sup>61.</sup> Id.; Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967 (2005).

<sup>62.</sup> National Cable & Telecommunications Association, *Investments in Infrastructure*, http://www.ncta.com/StatsGroup/Investments.aspx.

<sup>63.</sup> National Cable & Telecommunications Association, 2008 Industry Overview, http://i.ncta.com/ncta\_com/PDFs/NCTA\_Annual\_Report\_05.16.08.pdf

<sup>64.</sup> Diane Mermigas, Forecast: Cable Trumps Telcos, MediaPost BLOGS, Feb. 15, 2008, <a href="http://www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art\_aid=76584">http://www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art\_aid=76584</a>; Craig Moffett, "U.S. Telecom, Cable & Satellite: A Value Migration Roadmap." Bernstein Research, Feb. 4, 2008, page 21. A more recent report from Bernstein Research indicates that as the economic recession accelerated from mild to severe in 2008, all subscription services declined, however the flow share in video and broadband subscribers, which had previously favored cable, shifted back in favor of the telephone companies, largely as a result in the expansion of Verizon's marketable FiOS footprint in the last half of 2008. Craig Moffett, "U.S. Telecom, Cable & Satellite: Value Migration ... The Revenge of the Telcos?" Bernstein Research, Mar. 18, 2009, pages 15-19.

<sup>65.</sup> National Cable & Telecommunications Association, 2008 Industry Overview, http://i.ncta.com/ncta\_com/PDFs/NCTA\_Annual\_Report\_05.16.08.pdf.

<sup>66.</sup> Reuters, *UPDATE 1 – Comcast says it's now No. 3 US home phone provider*, Mar. 11, 2009, available at http://www.reuters.com/article/rbssTechMediaTelecomNews/idUSN1142437120090311.

• Within the last year, the cable industry has begun deployment of its next-generation DOCSIS 3.0 "wideband" service providing speeds of 50 to 60 Mbps. <sup>67</sup> Comcast plans to upgrade 65% of its network to the new standard by the end of 2009 and reach 100% deployment by the end of 2010. <sup>68</sup>

Not quite four years have passed since the regulatory status of cable and wireline broadband Internet access was settled and the FCC established a relatively deregulatory approach to service provisioning. We are just beginning to see the results of this U.S. experiment with deregulation and so far they are very encouraging.<sup>69</sup> It seems evident that the light-touch regulatory approach taken by the FCC has paid off and that facilities-

<sup>67.</sup> National Cable & Telecommunications Association Media Release, *NCTA Letter to Congress Regarding Implementation of Broadband Stimulus Funding*, Mar. 5, 2009, http://www.ncta.com/ReleaseType/MediaRelease/NCTA-Letter-to-Congress-Regarding-Implementation-of-Broadband-Stimulus-Funding.aspx.

<sup>68.</sup> Karl Bode, *Comcast DOC 3.0 Hits Harrisburg*, DSLReports.com (May 11, 2009), http://www.dslreports.com/shownews/102375.

<sup>69.</sup> See Thomas W. Hazlett, Natural Experiments in U.S. Broadband Regulation, Review of Network Economics, Vol. 7, Issue 4, December 2008 (DSL subscribership gained relative to cable modem service once the FCC ended line sharing obligations; consumer welfare benefits correlate to broadband deregulation); Debra J. Aron and Robert W. Crandall, White Paper, Investment in Next Generation Networks and Wholesale Telecommunications Regulation, November 3, 2008, available at http://ssrn.com/abstract=1294910 (Development of advanced broadband networks requires huge, risky investment at a scale that can threaten a company's viability and empirical analyses and case studies document the damaging effects of unbundling regulations on investment in the U.S., Europe, and elsewhere; research also documents the beneficial effects of intermodal (investment-based) competition on broadband penetration, and the insignificance of intramodal (unbundling-based) competition on broadband penetration;) Everett Ehrlich, "The Reality of Competition in the Broadband Market," Oct. 19, 2007, http://itif.org/files/Eisenach BroadbandCompetition.pdf (broadband Internet access market is dynamic and competition is not limited to price but includes also quality of service attributes of speed, applications and content availability; broadband market today is competitive, with different companies providing customers growing array of different approaches and technologies); Jeffrey A. Eisenach, Broadband Policy: Does the U.S. Have It Right After All? The Progress & Freedom Foundation, Progress on Point Release 15.14, Sep. 2008, http://www.pff.org/issuespubs/pops/2008/pop15.14USbroadbandpolicy.pdf ("[T]he relatively deregulatory American approach to broadband policy has produced highly desirable results, including high levels of investment and innovation, nearly ubiquitous broadband availability, high and increasing levels of penetration, falling prices, and high levels of consumer satisfaction. Indeed, the U.S. model is producing better overall results than in countries which continue to pursue mandatory unbundling and other highly regulatory approaches. Moreover, the advantages of the American model are likely to grow more pronounced over time..."); Debra J. Aron and David E. Burnstein, Broadband Adoption in the United States: An Empirical Analysis, March 2003, available at http://ssrn.com/abstract=386100 (study results showed "statistically significant positive impact on broadband adoption;" "focus in the current policy debate on ubiquitous access to broadband service may not be the most effective in driving adoption. Rather, policies that encourage facilities-based competition – and therefore, policies that encourage facilities investment by all platform providers, are perhaps more important").

based competition for the provision of triple-play packages, where it is available, is robust. The goal of the national plan should be to devise mechanisms to bring similar consumer welfare benefits to the remaining unserved and geographically underserved areas of the country to the extent feasible.

In this regard, it is significant that the European Commission (EC), long an advocate of government-mandated "open access" networks, recently declared that there is "no need for State intervention" in geographic areas where there are at least two facilities-based broadband network operators, because "there is no market failure." The EC's declaration is contained in proposed guidelines for the application of European Union "state aid" rules to funding initiatives for broadband networks; the report as a whole endorses government support of networks in unserved rural areas (so-called "white areas), while calling for detailed analysis of proposed aid to areas already served by at least one provider ("grey areas"). The proposed guidelines are categorically opposed to state intervention (funding initiatives) in "black areas" – those with at least two broadband network operators:

2.3.2.2. "Black areas": no need for State intervention

(37) When in a given geographical zone at least two broadband network providers are present and broadband services are provided under competitive conditions (facilities-based competition), there is no market failure. Accordingly, there is very little scope for State intervention to bring further benefits. On the contrary, state support for the funding of the construction of an additional broadband network will, in principle, lead to an unacceptable distortion of competition, and the crowding out of private

by June 22, 2009 and plans to adopt definitive guidelines on the issue later this year. Brian Hammon Telecommunications Reports Daily, *EC Proposes State Broadband Aid Guidelines*, May 22, 2009.

<sup>70. &</sup>quot;Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks," European Commission, available at <a href="http://www.broadband-europe.eu/Documents/guidelines\_en.pdf">http://www.broadband-europe.eu/Documents/guidelines\_en.pdf</a>. The EC has asked for comments on its proposed guidelines by June 22, 2009 and plans to adopt definitive guidelines on the issue later this year. Brian Hammond,

investors. Accordingly, in the absence of a clearly demonstrated market failure, the Commission will view negatively measures funding the roll-out of an additional broadband infrastructure in a "black zone."<sup>71</sup>

The logic of this argument is equally applicable to other forms of government intervention in the absence of market failure: it will lead to an unacceptable distortion of market forces and likely chill investment incentives. Empirical studies and analysis have shown that consumers are benefiting from the policy framework in place today in the U.S. and that they are likely to see greater gains ahead.<sup>72</sup> Evidence of broad market failure justifying regulatory intervention in the majority of broadband markets is lacking.

We respectfully submit, therefore, that the Commission recommend to Congress that the national broadband strategy incorporate continued reliance on private investment and market forces to the greatest extent possible, saving the government's power to intervene to a handful of limited instances: (1) intervention in geographic areas where the market has failed and is likely to continue to fail to meet demand for or otherwise deploy broadband platforms; (2) intervention in areas where key anchor institutions are inadequately served by broadband;<sup>73</sup> and (3) addressing demand side impediments<sup>74</sup> that

71. *Id.* at 9 (emphasis added).

<sup>72.</sup> See supra note 69. See also Greenstein and McDevitt, supra, note 17, at 42 ("a properly measured broadband price index shows a large change in prices . . . if pricing concentrates on a population of households that were early adaptors of the Internet, then the unmeasured priced decline is quite large.").

<sup>73. &</sup>quot;[B]y focusing broadband deployment funds on these anchor institutions [schools, public libraries, and hospitals], the federal government also will be supporting the Administration's broader goals of modernizing our educational and healthcare systems." Comments of Paula Boyd, Policy Counsel, and Marc Berejka, Senior Director, Technology Policy & Strategy, Microsoft, Joint Request for Comments on Implementing the American Recovery and Reinvestment Act of 2009, NTIA Docket No. 090309298-9299-01, GN Docket No. 09-40, filed April 13, 2009 at ii. See also Comments of AT&T Inc., In the Matter of American Recovery and Reinvestment Act of 2009 Broadband Initiatives, NTIA Docket No. 090309298-9299-0 (April 13, 2009) ("Prioritize in both unserved and underserved areas direct grants to public and non-profit anchor institutions so that they can buy the broadband services and equipment they need to fulfill their missions.").

in themselves depress additional deployment and prevent economic development or full participation in our democratic discourse.

#### IV. Widespread Government Intervention in the Broadband Markets is Unnecessary and Inappropriate; Additional Regulatory Constraints Should be Avoided

A significant section of the *NOI* is devoted to questioning whether increased government intervention in broadband markets is needed, and if so, what form that intervention should take.<sup>75</sup> At some level it is inevitable that, when a government body decides that something is not working as well as it should, its first institutional instinct is to impose additional public rules and obligations. Too often, though, the better answer is to remove unnecessary rules, pare down stifling regulatory bureaucracies, and encourage private investment. The broadband markets provide precisely such a case.

Contrary to some pessimistic reports, U.S. broadband deployment has proceeded at a remarkable rate. Despite the relatively large size of the entire U.S. market compared to most others captured in the OECD reports, the most recent figures from OECD show that the U.S. has the greatest number of broadband connections and it is among the leaders in fiber penetration.<sup>76</sup> Further, while most of the U.S. economy is shrinking, the

<sup>74.</sup> John Horrigan, *Obama's Online Opportunities II: If you build it will they log on?*, Pew Internet & the American Life Project (Jan. 21, 2009), <a href="http://www.pewinternet.org/Reports/2009/Stimulating-Broadband-If-Obama-builds-it-will-they-log-on.aspx">http://www.pewinternet.org/Reports/2009/Stimulating-Broadband-If-Obama-builds-it-will-they-log-on.aspx</a> (reporting numerous barriers to adoption, including price, user age and income level, lack of computer or computer literacy, and perceived lack of "relevance;" many of which will take years to overcome).

<sup>75.</sup> NOI, *supra* note 2 ¶¶ 36 et seq.

<sup>76.</sup> Organization for Economic Co-Operation and Development, Five largest OECD broadband markets (Dec. 2008), http://www.oecd.org/dataoecd/22/16/39574815.xls (showing the United States is the largest broadband market with 80.1 million subscribers, 30% of the OECD total); Organization for Economic Co-Operation and Development, Percentage of fiber connections in total broadband (Dec. 2008), http://www.oecd.org/dataoecd/21/58/39574845.xls (showing the United States in 8<sup>th</sup> place for fiber penetration among OECD countries).

information and technology ("IT") sector continues to grow.<sup>77</sup> The IT sector created nearly half of all new jobs in 2008.<sup>78</sup> And while economic growth fell generally by 6.1 percent in the first quarter of 2009, and overall investment fell by 37.9 percent,<sup>79</sup> broadband network providers continue to pour billions of dollars annually into upgrading and maintaining their networks. In short, the broadband industries are an essential driver of growth and prosperity. Rather than search for ways to throw sand in the gears of this economic machine, the national broadband plan should be focused on unleashing its great potential.<sup>80</sup>

One means of doing so is to allow broadband providers maximum flexibility to experiment with service offerings, rates, terms, and conditions, as they compete for market share. The vast majority of consumers have a choice among broadband providers (usually at least two wireline platforms, and one or more wireless broadband platforms); as in any competitive market, consumers are able to express their preferences by voting with their feet (or in this case, their mouse). Service providers respond to thusly-expressed consumer preferences, or ignore them at their peril. Under the circumstances, then, a one-size-fits-all approach disserves consumers by depriving them of their most

<sup>77.</sup> See Jeffrey A. Eisenach, Ph.D., Empiris, LLC, *The Telecom Sector and the Economy: How U.S. Broadband Policies Are Working for America*, Sept. 2008, http://www.empiris.com/docs/Telecom%20and%20the%20Economy%20September%202008.pdf.

<sup>78.</sup> Tom Amontree, United States Telecom Association, *Broadband Job Trends Offer Promising News*, Jan. 27, 2009, http://www.ustelecom.org/Video\_Blogs/Blog/index.php/2009/01/27/broadband-job-trends-offer-promising-news/.

<sup>79.</sup> Press Release, Bureau of Economic Analysis, First Quarter 2009 (advance), BEA 09-17 (Apr. 29, 2009), http://www.bea.gov/newsreleases/national/gdp/2009/gdp109a.htm.

<sup>80.</sup> Christina D. Romer, Chair, President's Council of Economic Advisors, *Growth Without Bubbles*, Session Three in the Stephen C. Freidheim Symposium On Global Economics On Financial Turbulence And U.S. Power (May 12, 2009), <a href="http://www.cfr.org/publication/19402/growth\_without\_bubbles\_session\_three\_in\_the\_stephen\_c\_freidheim\_symposium\_on\_global\_economics\_on\_financial\_turbulence\_and\_us\_power.html">http://www.cfr.org/publication/19402/growth\_without\_bubbles\_session\_three\_in\_the\_stephen\_c\_freidheim\_symposium\_on\_global\_economics\_on\_financial\_turbulence\_and\_us\_power.html (nonhousing business investment is key to long-term growth in the economy).

powerful weapon – choice. Regulatory restraint should continue to guide government policy, reserving *ex ante* regulatory intervention to targeted areas exhibiting demonstrable and sustained market failure. As we noted in Section II, there is nothing to suggest that the broadband markets are in any way exceptional, and this suggests that *ex post* non-sector specific consumer protection and competition laws are full able to protect consumer interests where service providers either fail to deliver their services as promised, act in restraint of trade, or engage in other anticompetitive activity.

The *NOI* asks a series of questions about the value of the FCC's *Internet Policy Statement*, and specifically whether it should modify or expand the "open network" principle.<sup>81</sup> But "openness" is not an end in and of itself, and its usefulness as a guiding principle has declined as networks have proliferated and the applications traversing them have become more complex.<sup>82</sup> That is not to say that consumers should not have great flexibility when they use broadband networks. But the level of openness and network intermediary functionality available on any network should be determined by consumers and service providers in an open market, rather than by regulators.

In particular, there is no need to codify the FCC's existing *Internet Policy Statement* and doing so as part of a national broadband strategy to increase access to broadband capability is inadvisable. As conceived, the FCC's principles articulated

<sup>81.</sup> NOI, *supra* note 2 ¶¶ 47-48; *In re* Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review — Review of Computer III and ONA Safeguards and Requirements; Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, *Policy Statement*, 20 F.C.C.R. 14,986 (Aug. 5, 2005).

<sup>82.</sup> Marjory S. Blumenthal & David D. Clark, "Rethinking the Design of the Internet: The End-to-End Arguments v. the Brave New World," ACM Transactions on Internet Technology (Vol. I, No. 1, Aug. 2001) (the need for a "smart" network intermediary has increased, not decreased).

aspirational goals intended to preserve the key attributes of "openness" for consumers associated with today's broadband Internet access services. The principles were developed with industry and consumer group input and reflect a consensus of many Internet stakeholders. From a policy perspective, most stakeholders seem to agree that broadband Internet service providers should: (1) deliver the services they have contracted to deliver; (2) adequately inform their subscribers about the services they have purchased; (3) not impede consumer access to or use of lawful content, applications, and devices; and (4) generally behave in a neutral manner with respect to transmission of bits to the greatest extent possible.<sup>83</sup> At the same time, policymakers must recognize that there are physical limitations on networks that must be taken into account and these are better resolved by engineers, standards-setting bodies and network operators working together to achieve the efficient use of network resources than by regulators.

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<sup>83.</sup> See, e.g., Network Neutrality: Competition, Innovation, and Nondiscriminatory Access: Hearing Before the Telecom & Antitrust Task Force of the H. Comm. on the Judiciary, 109th Cong. (2006) (statement of Timothy Wu, Professor, Columbia Law School) (discussing rules regarding rules governing discriminatory actions by broadband providers); US Broadband Coalition, A Call to Action for a National Broadband Strategy, http://bb4us.net/id10.html (last visited Apr. 23, 2008) (outlining the goals of a national broadband strategy adopted by a broad coalition of communications providers, consumers, public interest groups, and state and local governments, which include broadband Internet access that is, to maximum extent possible, open to all users and service, content and applications providers; network operators must have the right to manage their networks responsibly, pursuant to clear standards; markets for the Internet and broadband should be as competitive as reasonably possible; and broadband networks should provide network performance, capacity and connections necessary to enable America to be globally competitive); In re Broadband Industry Practices, WC Docket No. 07-52, Comments of Google, Inc. 21–22 (June 15, 2007) (commenting that most participants in net neutrality debate agree that prohibited practices include blocking, impairing, or degrading Internet traffic, and the unilateral imposition of terminating charges on Web companies; most also agree that permitted practices include reasonable network management and differential, but not discriminatory, business practices); In re Broadband Industry Practices, WC Docket No. 07-52, Comments of the United States Telecom Association 9–10 (June 10, 2007) (explaining that industrydeveloped principles supplied a foundation for the FCC to develop its own set of guidelines in its broadband policy statement).

Today there are some 121.2 million broadband Internet service lines in the United States, <sup>84</sup> but only precious few instances where broadband network operators are alleged to have "violated" the principles. <sup>85</sup> This is a very good indication of the magnitude of any serious "net neutrality" *problem*: It is infinitesimal compared to the number of broadband Internet access service subscribers. Any and all perceived violations of these principles are met with immediate and widespread public attention through the very medium that is allegedly at risk: the Internet. <sup>86</sup> Accordingly, there is simply no need for codification of the principles at this time as there is no significant evidence that the "openness" of the Internet is under threat by broadband Internet service providers today or that it will be tomorrow. <sup>87</sup>

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<sup>84.</sup> Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, *High Speed Services for Internet Access: Status as of Dec. 31, 2007*, p. 1 (Jan. 2009).

<sup>85.</sup> *In re* Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, Broadband Industry Practices, Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management," *Memorandum Opinion and Order*, 23 F.C.C.R. 13,028, ¶ 10 (Aug. 1, 2008); *In re* Madison River Communications, LLC and affiliated companies, *Order*, 20 F.C.C.R. 4295 (Mar. 3, 2005)(action not premised on the *Internet Policy Statement*, but on similar policy approach).

<sup>86.</sup> For example, NNSquad is an online group focused on "detection, analysis, and incident reporting of any anticompetitive, discriminatory, or other restrictive actions on the part of Internet Service Providers (ISPs) or affiliated entities." NNSquad, <a href="http://www.nnsquad.org">http://www.nnsquad.org</a> (last accessed June 3, 2009). In addition, Stop the Cap!, is an online group focused on "fight[ing] back against Internet usage caps for cable, DSL, and fiber optic broadband" has been successful in eliminating tiering pricing tests conducted by Time Warner. Phillip Dampier, *Time Warner Cable Ends Cap 'n Tier "Trial" in Beaumont*, Stop the Cap!, May 13, 2009, <a href="http://stopthecap.com/2009/05/13/time-warner-cable-ends-cap-n-tier-trial-in-beaumont/">http://stopthecap.com/2009/05/13/time-warner-cable-ends-cap-n-tier-trial-in-beaumont/</a>.

<sup>87.</sup> In presenting a case for the pressing need for "net neutrality" regulation, advocates of codification of the FCC's Internet principles are often reduced to citing a 31/2 year old remark by former AT&T CEO Ed Whitacre that certain Internet application providers should be charged for their "use" of AT&T's platform to reach Internet users and more recent remarks concerning pressure on the traditional cable television business model by Time Warner Cable's CEO Glenn Britt. See, e.g., Free Press, Dismantling Digital Deregulation at 68, 71 ("How do you think they're [companies like Google] going to get to customers? Through a broadband pipe. Cable companies have them. We have them. Now what they would like to do is use my pipes for free, but I ain't going to let them to do that because we have spent capital and we have to have a return on that. So there's going to have to be some mechanism for these people who use these pipes to pay for the portion they're using . . . The Internet can't be free in that sense, because we and the cable companies have made an investment and for a

Nor is it evident that consumers will invariably benefit if non-technical government officials attempt to codify and expand the principles and/or impose some form of common carrier regulation on broadband ISPs. 88 Although the *Internet Policy Statement* has provided useful guidance in terms of what consumers expect and what is presumptively permissible, it has done so precisely because it was formed through industry consensus and phrased in terms of flexible principles rather than rigid rules. Indeed, in the one case in which the Commission has attempted to base concrete proscriptions on the *Internet Policy Statement*, it has foreclosed potentially useful tools and cabined off an entire branch of network management techniques that may now, or in the future, have provided real consumer welfare benefits. 89 The FCC's *Comcast P2P* 

Google or Yahoo! or Vonage or anybody to expect to use these pipes [for] free is nuts!"; "Consider Time Warner Cable CEO Glenn Britt's recent statement to investors: 'People will choose not to buy subscription video if they can get the same stuff for free. . . . I think the cable network business will suffer mightily if this trend continues.""). Disparate statements of corporate CEOs such as these cannot possibly provide a serious basis for regulatory intervention into a functioning marketplace. The nation's antitrust authorities are well positioned to intervene should broadband Internet Service Providers move out of the range of speculative thinking and begin to engage in blocking or degrading service for anticompetitive purposes.

<sup>88.</sup> In setting aspirational policy goals or principles, as opposed to enforceable rules, the FCC need not squarely confront the limits of its delegated authority under the Communications Act of 1934, as amended. 47 U.S.C. §§151, et seq.

<sup>89.</sup> In re Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications; Broadband Industry Practices, Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management," Memorandum Opinion and Order, 23 F.C.C.R. 13,028, (Aug. 1, 2008) [hereinafter Comcast P2P Order], appeal pending, Comcast Corp. v. FCC, No. 08-1291, review granted (D.C. Cir. Filed Sept. 4, 2008). In the Comcast P2P Order, the Commission applied its "ancillary jurisdiction" to enforce the *Internet Policy* Statement principles against Comcast, citing seven separate provisions of the Communications Act, although it placed principal reliance on sections 230(b) and 706. Whether the Commission's action in that case was in fact lawful or was instead beyond its delegated authority likely will be determined by the D.C. Circuit Court of Appeals within the next year. We are doubtful the FCC has jurisdiction to enforce the Policy Statement on the grounds set forth in the Comcast P2P Order. See Barbara Esbin and Adam Marcus, "The Law is Whatever the Nobles Do": Undue Process at the FCC, 17 CommLaw Conspectus 535 (forthcoming Spring 2009). Whether the Commission possesses ancillary jurisdiction to codify the principles contained in the *Internet Policy Statement* under some other theory of its ancillary jurisdiction is a separate question. See Kevin Werbach, Off the Hook, Cornell L. Rev. (forthcoming), available at http://ssrn.com/abstract=1371222 (last updated April 1, 2009) (also expressing doubt about the jurisdictional basis of the action against Comcast and arguing that the FCC

*Order* could be interpreted to prohibit prioritizing time-sensitive communications such as voice-over-IP, videoconferencing, multi-player games, and remote control applications over non-time-sensitive communications such as file transfers.

Similarly, price regulation in the broadband Internet access markets is unnecessary and would likely be affirmatively harmful. Competitive markets efficiently set prices at rates that create incentives for investment while delivering goods and services to consumers who value them. Given the ever increasing capacity demands that are being placed on broadband Internet access networks, and the likely negative effect that price regulation would have on new investment, any suggestion that broadband rates should be regulated would be counter-productive.

#### **CONCLUSION**

A national broadband strategy that complements rather than supplants private initiative and investment is far more likely to bring the full promise and benefits of access to ubiquitous broadband capability for all. Private companies are investing billions of dollars in broadband infrastructure and services in the U.S. Such investments should be encouraged, not punished or impeded. If the FCC's national broadband plan is to satisfy that standard, it should provide for flexible and dynamic rules and definitions, address areas of need unmet and likely to remain unmet by the market, avoid unnecessary government intervention in the markets, and decline to mandate or favor particular business models.

/s/ W. Kenneth Ferree

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may locate its authority to regulate the Internet in its obligations to oversee interconnection under Title II Of the Communications Act).

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